

Sub
8B

SEQUENCE LISTING

<110> Hayden, Michael R.
Wilson, Angela R.
Pimstone, Simon N.

<120> METHODS AND REAGENTS FOR MODULATING
CHOLESTEROL LEVELS

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<151> 1999-03-15

<150> 60/138,048

<151> 1999-06-08

<150> 60/139,600

<151> 1999-06-17

<150> 60/151,977

<151> 1999-09-01

<160> 287

<170> FastSEQ for Windows Version 4.0

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<211> 2261

<212> PRT

<213> Homo sapiens

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Leu Phe Ile Phe Leu Ile Leu Ile Ser Val Arg Leu Ser Tyr Pro Pro
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Tyr Glu Gln His Glu Cys His Phe Pro Asn Lys Ala Met Pro Ser Ala
50 55 60
Gly Thr Leu Pro Trp Val Gln Gly Ile Ile Cys Asn Ala Asn Asn Pro
65 70 75 80
Cys Phe Arg Tyr Pro Thr Pro Gly Glu Ala Pro Gly Val Val Gly Asn
85 90 95
Phe Asn Lys Ser Ile Val Ala Arg Leu Phe Ser Asp Ala Arg Arg Leu
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Leu Leu Tyr Ser Gln Lys Asp Thr Ser Met Lys Asp Met Arg Lys Val
115 120 125
Leu Arg Thr Leu Gln Gln Ile Lys Lys Ser Ser Ser Asn Leu Lys Leu

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Gln Asp Phe Leu Val	Asp Asn Glu Thr Phe	Ser Gly Phe Leu Tyr His		
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Val Ile Leu His Lys	Val Phe Leu Gln Gly	Tyr Gln Leu His Leu Thr		
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Ser Leu Cys Asn Gly	Ser Lys Ser Glu Glu	Met Ile Gln Leu Gly Asp		
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Gln Glu Val Ser Glu	Leu Cys Gly Leu Pro	Arg Glu Lys Leu Ala Ala		
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Ala Glu Arg Val Leu	Arg Ser Asn Met Asp	Ile Leu Lys Pro Ile Leu		
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Arg Thr Leu Asn Ser	Thr Ser Pro Phe Pro	Ser Lys Glu Leu Ala Glu		
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Ala Thr Lys Thr Leu	Leu His Ser Leu Gly	Thr Leu Ala Gln Glu Leu		
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Phe Ser Met Arg Ser	Trp Ser Asp Met Arg	Gln Glu Val Met Phe Leu		
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Thr Asn Val Asn Ser	Ser Ser Ser Ser Thr	Gln Ile Tyr Gln Ala Val		
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Ser Arg Ile Val Cys	Gly His Pro Glu Gly	Gly Gly Leu Lys Ile Lys		
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Ser Leu Asn Trp Tyr	Glu Asp Asn Asn Tyr	Lys Ala Leu Phe Gly Gly		
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Asn Gly Thr Glu Glu	Asp Ala Glu Thr Phe	Tyr Asp Asn Ser Thr Thr		
	340	345	350	
Pro Tyr Cys Asn Asp	Leu Met Lys Asn Leu	Glu Ser Ser Pro Leu Ser		
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Arg Ile Ile Trp Lys	Ala Leu Lys Pro Leu	Leu Val Gly Lys Ile Leu		
	370	375	380	
Tyr Thr Pro Asp Thr	Pro Ala Thr Arg Gln	Val Met Ala Glu Val Asn		
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Lys Thr Phe Gln Glu	Leu Ala Val Phe His	Asp Leu Glu Gly Met Trp		
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Glu Glu Leu Ser Pro	Lys Ile Trp Thr Phe	Met Glu Asn Ser Gln Glu		
	420	425	430	
Met Asp Leu Val Arg	Met Leu Leu Asp Ser	Arg Asp Asn Asp His Phe		
	435	440	445	
Trp Glu Gln Gln Leu	Asp Gly Leu Asp Trp	Thr Ala Gln Asp Ile Val		
	450	455	460	
Ala Phe Leu Ala Lys	His Pro Glu Asp Val	Gln Ser Ser Asn Gly Ser		
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Val Tyr Thr Trp Arg	Glu Ala Phe Asn Glu	Thr Asn Gln Ala Ile Arg		
	485	490	495	
Thr Ile Ser Arg Phe	Met Glu Cys Val Asn	Leu Asn Lys Leu Glu Pro		
	500	505	510	
Ile Ala Thr Glu Val	Trp Leu Ile Asn Lys	Ser Met Glu Leu Leu Asp		
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Glu Arg Lys Phe Trp	Ala Gly Ile Val Phe	Thr Gly Ile Thr Pro Gly		
530	535	540		

Ser	Ile	Glu	Leu	Pro	His	His	Val	Lys	Tyr	Lys	Ile	Arg	Met	Asp	Ile
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Asp	Asn	Val	Glu	Arg	Thr	Asn	Lys	Ile	Lys	Asp	Gly	Tyr	Trp	Asp	Pro
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Gly	Pro	Arg	Ala	Asp	Pro	Phe	Glu	Asp	Met	Arg	Tyr	Val	Trp	Gly	Gly
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Phe	Ala	Tyr	Leu	Gln	Asp	Val	Val	Glu	Gln	Ala	Ile	Ile	Arg	Val	Leu
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Thr	Gly	Thr	Glu	Lys	Lys	Thr	Gly	Val	Tyr	Met	Gln	Gln	Met	Pro	Tyr
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Pro	Cys	Tyr	Val	Asp	Asp	Ile	Phe	Leu	Arg	Val	Met	Ser	Arg	Ser	Met
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Pro	Leu	Phe	Met	Thr	Leu	Ala	Trp	Ile	Tyr	Ser	Val	Ala	Val	Ile	Ile
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Lys	Gly	Ile	Val	Tyr	Glu	Lys	Glu	Ala	Arg	Leu	Lys	Glu	Thr	Met	Arg
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Ile	Met	Gly	Leu	Asp	Asn	Ser	Ile	Leu	Trp	Phe	Ser	Trp	Phe	Ile	Ser
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Ser	Leu	Ile	Pro	Leu	Leu	Val	Ser	Ala	Gly	Leu	Leu	Val	Val	Ile	Leu
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Phe	Leu	Ser	Val	Phe	Ala	Val	Val	Thr	Ile	Leu	Gln	Cys	Phe	Leu	Ile
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Ser	Thr	Leu	Phe	Ser	Arg	Ala	Asn	Leu	Ala	Ala	Ala	Cys	Gly	Gly	Ile
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Ile	Tyr	Phe	Thr	Leu	Tyr	Leu	Pro	Tyr	Val	Leu	Cys	Val	Ala	Trp	Gln
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Asp	Tyr	Val	Gly	Phe	Thr	Leu	Lys	Ile	Phe	Ala	Ser	Leu	Leu	Ser	Pro
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Val	Ala	Phe	Gly	Phe	Gly	Cys	Glu	Tyr	Phe	Ala	Leu	Phe	Glu	Glu	Gln
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Gly	Ile	Gly	Val	Gln	Trp	Asp	Asn	Leu	Phe	Glu	Ser	Pro	Val	Glu	Glu
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Asp	Gly	Phe	Asn	Leu	Thr	Thr	Ser	Val	Ser	Met	Met	Leu	Phe	Asp	Thr
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Phe	Leu	Tyr	Gly	Val	Met	Thr	Trp	Tyr	Ile	Glu	Ala	Val	Phe	Pro	Gly
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Gln	Tyr	Gly	Ile	Pro	Arg	Pro	Trp	Tyr	Phe	Pro	Cys	Thr	Lys	Ser	Tyr
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Trp	Phe	Gly	Glu	Glu	Ser	Asp	Glu	Lys	Ser	His	Pro	Gly	Ser	Asn	Gln
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Lys	Arg	Ile	Ser	Glu	Ile	Cys	Met	Glu	Glu	Glu	Pro	Thr	His	Leu	Lys
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Leu	Gly	Val	Ser	Ile	Gln	Asn	Leu	Val	Lys	Val	Tyr	Arg	Asp	Gly	Met
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Lys	Val	Ala	Val	Asp	Gly	Leu	Ala	Leu	Asn	Phe	Tyr	Glu	Gly	Gln	Ile
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Thr	Ser	Phe	Leu	Gly	His	Asn	Gly	Ala	Gly	Lys	Thr	Thr	Thr	Met	Ser
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Ile	Leu	Thr	Gly	Leu	Phe	Pro	Pro	Thr	Ser	Gly	Thr	Ala	Tyr	Ile	Leu

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Gly Lys Asp Ile Arg Ser Glu Met Ser Thr Ile Arg Gln Asn Leu Gly						
	965		970		975	
Val Cys Pro Gln His Asn Val Leu Phe Asp Met Leu Thr Val Glu Glu						
	980		985		990	
His Ile Trp Phe Tyr Ala Arg Leu Lys Gly Leu Ser Glu Lys His Val						
	995		1000		1005	
Lys Ala Glu Met Glu Gln Met Ala Leu Asp Val Gly Leu Pro Ser Ser						
	1010		1015		1020	
Lys Leu Lys Ser Lys Thr Ser Gln Leu Ser Gly Gly Met Gln Arg Lys						
	1025		1030		1035	1040
Leu Ser Val Ala Leu Ala Phe Val Gly Gly Ser Lys Val Val Ile Leu						
	1045		1050		1055	
Asp Glu Pro Thr Ala Gly Val Asp Pro Tyr Ser Arg Arg Gly Ile Trp						
	1060		1065		1070	
Glu Leu Leu Leu Lys Tyr Arg Gln Gly Arg Thr Ile Ile Leu Ser Thr						
	1075		1080		1085	
His His Met Asp Glu Ala Asp Val Leu Gly Asp Arg Ile Ala Ile Ile						
	1090		1095		1100	
Ser His Gly Lys Leu Cys Cys Val Gly Ser Ser Leu Phe Leu Lys Asn						
	1105		1110		1115	1120
Gln Leu Gly Thr Gly Tyr Tyr Leu Thr Leu Val Lys Lys Asp Val Glu						
	1125		1130		1135	
Ser Ser Leu Ser Ser Cys Arg Asn Ser Ser Ser Thr Val Ser Tyr Leu						
	1140		1145		1150	
Lys Lys Glu Asp Ser Val Ser Gln Ser Ser Ser Asp Ala Gly Leu Gly						
	1155		1160		1165	
Ser Asp His Glu Ser Asp Thr Leu Thr Ile Asp Val Ser Ala Ile Ser						
	1170		1175		1180	
Asn Leu Ile Arg Lys His Val Ser Glu Ala Arg Leu Val Glu Asp Ile						
	1185		1190		1195	1200
Gly His Glu Leu Thr Tyr Val Leu Pro Tyr Glu Ala Ala Lys Glu Gly						
	1205		1210		1215	
Ala Phe Val Glu Leu Phe His Glu Ile Asp Asp Arg Leu Ser Asp Leu						
	1220		1225		1230	
Gly Ile Ser Ser Tyr Gly Ile Ser Glu Thr Thr Leu Glu Glu Ile Phe						
	1235		1240		1245	
Leu Lys Val Ala Glu Glu Ser Gly Val Asp Ala Glu Thr Ser Asp Gly						
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Thr Leu Pro Ala Arg Arg Asn Arg Arg Ala Phe Gly Asp Lys Gln Ser						
	1265		1270		1275	1280
Cys Leu Arg Pro Phe Thr Glu Asp Asp Ala Ala Asp Pro Asn Asp Ser						
	1285		1290		1295	
Asp Ile Asp Pro Glu Ser Arg Glu Thr Asp Leu Leu Ser Gly Met Asp						
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Gly Lys Gly Ser Tyr Gln Val Lys Gly Trp Lys Leu Thr Gln Gln Gln						
	1315		1320		1325	
Phe Val Ala Leu Leu Trp Lys Arg Leu Leu Ile Ala Arg Arg Ser Arg						
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Lys Gly Phe Phe Ala Gln Ile Val Leu Pro Ala Val Phe Val Cys Ile						
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Ala Leu Val Phe Ser Leu Ile Val Pro Pro Phe Gly Lys Tyr Pro Ser
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 Leu Glu Leu Gln Pro Trp Met Tyr Asn Glu Gln Tyr Thr Phe Val Ser
 1380 1385 1390
 Asn Asp Ala Pro Glu Asp Thr Gly Thr Leu Glu Leu Leu Asn Ala Leu
 1395 1400 1405
 Thr Lys Asp Pro Gly Phe Gly Thr Arg Cys Met Glu Gly Asn Pro Ile
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 Pro Asp Thr Pro Cys Gln Ala Gly Glu Glu Glu Trp Thr Thr Ala Pro
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 Val Pro Gln Thr Ile Met Asp Leu Phe Gln Asn Gly Asn Trp Thr Met
 1445 1450 1455
 Gln Asn Pro Ser Pro Ala Cys Gln Cys Ser Ser Asp Lys Ile Lys Lys
 1460 1465 1470
 Met Leu Pro Val Cys Pro Pro Gly Ala Gly Gly Leu Pro Pro Pro Gln
 1475 1480 1485
 Arg Lys Gln Asn Thr Ala Asp Ile Leu Gln Asp Leu Thr Gly Arg Asn
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 Ile Ser Asp Tyr Leu Val Lys Thr Tyr Val Gln Ile Ile Ala Lys Ser
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 Leu Gly Val Ser Asn Thr Gln Ala Leu Pro Pro Ser Gln Glu Val Asn
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 Asp Ala Ile Lys Gln Met Lys Lys His Leu Lys Leu Ala Lys Asp Ser
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 Ser Ala Asp Arg Phe Leu Asn Ser Leu Gly Arg Phe Met Thr Gly Leu
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 Asp Thr Arg Asn Asn Val Lys Val Trp Phe Asn Asn Lys Gly Trp His
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 Ala Ile Ser Ser Phe Leu Asn Val Ile Asn Asn Ala Ile Leu Arg Ala
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 Met Thr Thr Ser Val Asp Val Leu Val Ser Ile Cys Val Ile Phe Ala
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 Val Ser Lys Ala Lys His Leu Gln Phe Ile Ser Gly Val Lys Pro Val
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 Ile Tyr Trp Leu Ser Asn Phe Val Trp Asp Met Cys Asn Tyr Val Val
 1700 1705 1710
 Pro Ala Thr Leu Val Ile Ile Ile Phe Ile Cys Phe Gln Gln Lys Ser
 1715 1720 1725
 Tyr Val Ser Ser Thr Asn Leu Pro Val Leu Ala Leu Leu Leu Leu
 1730 1735 1740
 Tyr Gly Trp Ser Ile Thr Pro Leu Met Tyr Pro Ala Ser Phe Val Phe
 1745 1750 1755 1760
 Lys Ile Pro Ser Thr Ala Tyr Val Val Leu Thr Ser Val Asn Leu Phe

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Asn	Gln	Ala	Met	Ala	Asp	Ala	Leu	Glu	Arg	Phe	Gly	Glu	Asn	Arg	Phe
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Val	Ser	Pro	Leu	Ser	Trp	Asp	Leu	Val	Gly	Arg	Asn	Leu	Phe	Ala	Met
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Ala	Val	Glu	Gly	Val	Val	Phe	Phe	Leu	Ile	Thr	Val	Leu	Ile	Gln	Tyr
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Arg	Phe	Phe	Ile	Arg	Pro	Arg	Pro	Val	Asn	Ala	Lys	Leu	Ser	Pro	Leu
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Asn	Asp	Glu	Asp	Glu	Asp	Val	Arg	Arg	Glu	Arg	Gln	Arg	Ile	Leu	Asp
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Pro	Pro	Gly	Glu	Cys	Phe	Gly	Leu	Leu	Gly	Val	Asn	Gly	Ala	Gly	Lys
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Ser	Ser	Thr	Phe	Lys	Met	Leu	Thr	Gly	Asp	Thr	Thr	Val	Thr	Arg	Gly
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Asp	Ala	Phe	Leu	Asn	Lys	Asn	Ser	Ile	Leu	Ser	Asn	Ile	His	Glu	Val
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His	Gln	Asn	Met	Gly	Tyr	Cys	Pro	Gln	Phe	Asp	Ala	Ile	Thr	Glu	Leu
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